ANALYZER, PROTOCOL

AN6AA-B

- 1.0 <u>GENERAL</u> This procurement requires a wide-area network (WAN) protocol analyzer.
- 2.0 <u>CLASSIFICATION</u> Type II, Class 5, Style G and Color R in accordance with MIL-T-28800 for shipboard applications.
- 3.0 <u>OPERATIONAL REQUIREMENTS</u> The equipment shall monitor and emulate bitoriented, and character-oriented protocols. The equipment shall automatically decipher and configure itself for line parameters, including protocol, rate, code, error checking, and inverted data. Additionally, the equipment shall operate as DCE and DTE and comply with the following minimum requirements. The equipment shall be upgradeable to include LAN analysis capabilities.
- 3.1 <u>Protocols</u> Bit-oriented: HDLC, SDLC, X.25, SS#7, SNA, and ISDN. Character-oriented: Asynchronous, Bisynchronous, Synchronous, IPARS, and DDCMP.
- 3.2 <u>Data Rates</u> 50 bps to 1.544 Mbps full duplex with internal and external clock capability. T1, Nx56 kbps, Nx64kbps, and ISDN basic and primary rates shall also be provided.
- 3.3 <u>Line Codes (level)</u> ASCII (7 and 8), IPARS (6), Baudot (5), EBCDIC (8), and Hexadecimal
- 3.4 Error Checks CRC, BCC, LRC, Parity (odd, even, none), FCS, and DDCMP
- 3.5 <u>Interfaces</u> RS-232/V.24 with lead-monitoring and signal-injecting breakout, RS-449, TIA-530, MIL-188-114 balanced and unbalanced, T1, V.35, and ISDN basic and primary rate

- 3.6 <u>Capture Buffer</u> Ram Storage: 1 Mbytes minimum. Disk storage: 3.5 in. floppy disk, 720 kbyte minimum. End-to-end scroll capability shall be provided.
- 3.7 <u>Trigger Events</u> The equipment shall be triggerable upon occurrence of any of five events definable as one of the following:
 - a. Data: 1 to 16 characters in length
 - b. EIA lead transition
 - c. External: EIA voltage transition
 - d. Errors: Parity, frame, CRC, or BCC

At least three counters and timers shall be provided as defined in 3.7.1 and 3.7.2.

- 3.7.1 Counters. Counts the number of occurrences of an event up to 65,535.
- 3.7.2 Timers. 1 ms to 24 hours with 1 ms resolution. Measures the time between events.
- 3.7.3 Audible Alarm. Sounds on event.
- 3.8 <u>Trigger Modes</u> Stop on trigger or post-trigger character, capture buffer full.
- 3.9 Alphanumeric Display Resolution: 480 by 640 pixels minimum. Size: 9 in. diagonal minimum. The display shall be configurable for DTE, DCE, DTE and DCE, hexadecimal, and packet decoding.
- 3.10 Printer Output Serial or parallel interface
- 3.11 <u>Rackmounting</u> The equipment shall be provided with a conversion kit which will allow rackmounting in accordance with the convertible/rackmountable requirements of MIL-T-28800.
- 4.0 GENERAL REQUIREMENTS
- 4.1 <u>Power Source</u> MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 200W.

- 4.2 <u>Lithium Batteries</u> Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.
- 4.3 Weight 20 kg (44 lb) maximum